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ABSTRACT

This document provides statistical information on the incidence of U.S. motor vehicle-related accidents and fatalities involving children. Data include: (1) total traffic fatalities among children 0-14 years old, by age group, 1990-2000; (2) total pedestrian fatalities among children 0-14 years old, by age group, 1990-2000; (3) total pedalcyclist fatalities among children 0-14 years old, by age group, 1990-2000; (4) restraint use by passenger vehicle occupants involved in fatal crashes by age group, 2000; (5) children under 5 years old fatally injured in passenger vehicle crashes, by age group and type of restraint, 2000; and (6) restraint use by children under 5 years old. According to the data, motor vehicle crashes are the leading cause of death for children of every age from 4 to 14 years old, and the 0-14 age group accounted for 6 percent of traffic fatalities in 2000. (EV)

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# Children. Traffic Safety Facts 2000.

## U.S. Department of Transportation National Highway Traffic Safety Administration

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U.S. Department of Transportation
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# Traffic Safety Facts 2000

## Children

NHTSA
People Saving People
www.nhtsa.dot.gov

In 2000, there were 59 million children under 15 years old in the United States. This age group (0-14 years) made up 21 percent of the total U.S. resident population in 2000.

Motor vehicle crashes are the **leading cause of death** for children of every age from 4 to 14 years old (based on 1998 figures, which are the latest mortality data currently available from the National Center for Health Statistics).

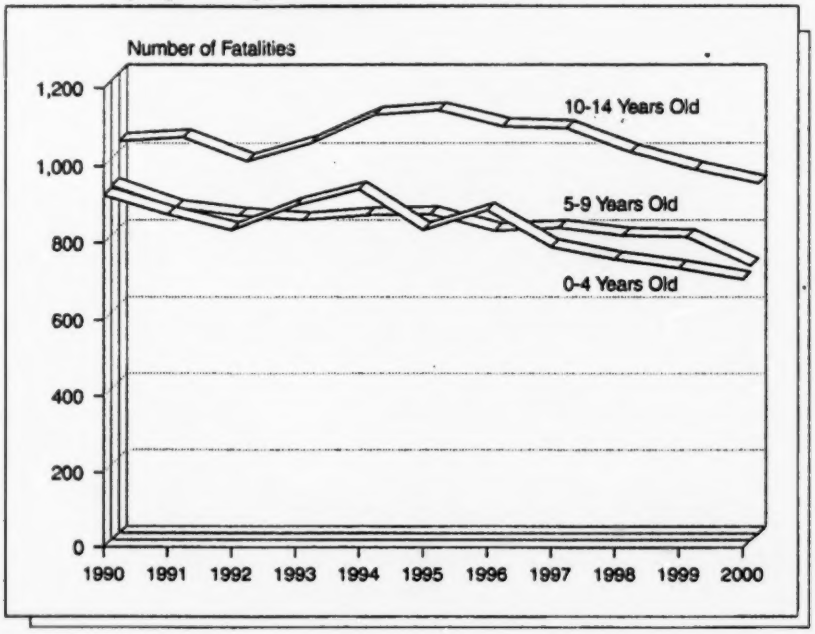
In 2000, there were a total of 41,821 traffic fatalities in the United States. The 0-14 age group accounted for 6 percent (2,343) of those traffic fatalities. In addition, children under 15 years old accounted for 5 percent (1,668) of all vehicle **occupant fatalities**, 9 percent (291,000) of all the **people injured** in motor vehicle crashes, and 8 percent (248,000) of all the vehicle occupants injured in crashes.

In the United States, an average of 6 children 0-14 years old were killed and 797 were injured every day in motor vehicle crashes during 2000.

In the 0-14 year age group, males accounted for 56 percent of the fatalities and 51 percent of those injured in motor vehicle crashes during 2000.

***"Motor vehicle crashes are the leading cause of death for children from 4 to 14 years old."***

**Figure 1. Total Traffic Fatalities Among Children 0-14 Years Old by Age Group, 1990-2000**

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### Child Endangerment

In 2000, 20 percent of the children under 15 years old who were killed in motor vehicle crashes were killed in alcohol-related crashes.

Of the children 0-14 years old who were killed in alcohol-related crashes during 2000, almost half (223) were passengers in vehicles with drivers who had been drinking, with blood alcohol concentration (BAC) levels of 0.01 gram per deciliter (g/dl) or higher. An additional 123 children were killed as passengers in vehicles with drivers who had not been drinking.

Another 80 children under 15 years old who were killed in traffic crashes in 2000 were pedestrians or pedalcyclists who were struck by drinking drivers (BAC ≥0.01 g/dl).

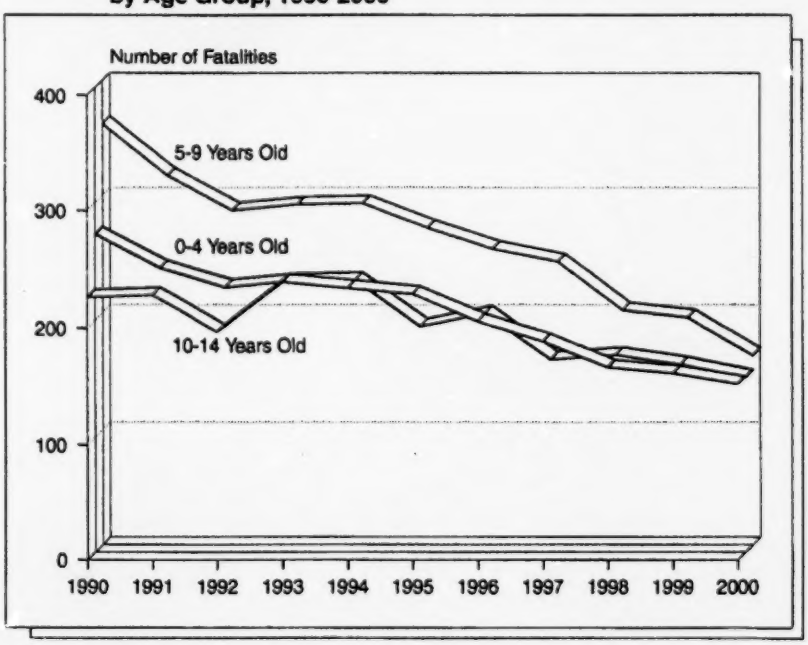
### Pedestrians

*"In 2000, 20 percent of the children under 15 years old killed in crashes were killed in alcohol-related crashes."*

In 1990, there were 861 pedestrian fatalities in the 0-14 year age group. From 1990 to 2000, the number of pedestrian fatalities in this age group decreased by 46 percent, with the 5-9 year age group showing the largest decrease.

There were 4,739 pedestrian fatalities in 2000. The 0-14 age group accounted for 469 (10 percent) of those fatalities, and 59 percent of the pedestrian fatalities in this age group were males.

**Figure 2. Total Pedestrian Fatalities Among Children 0-14 Years Old by Age Group, 1990-2000**



In addition to the pedestrians under 15 years old who died, 22,000 were injured in motor vehicle crashes. These young pedestrians accounted for 29 percent of the total pedestrians injured in motor vehicle crashes in 2000.

One-fifth (20 percent) of the traffic fatalities in the 0-14 year age group were pedestrians.

During 2000, 43 percent of the young pedestrian fatalities occurred between the hours of 4 pm and 8 pm, and 81 percent occurred at non-intersection locations.

### *Pedalcyclists*

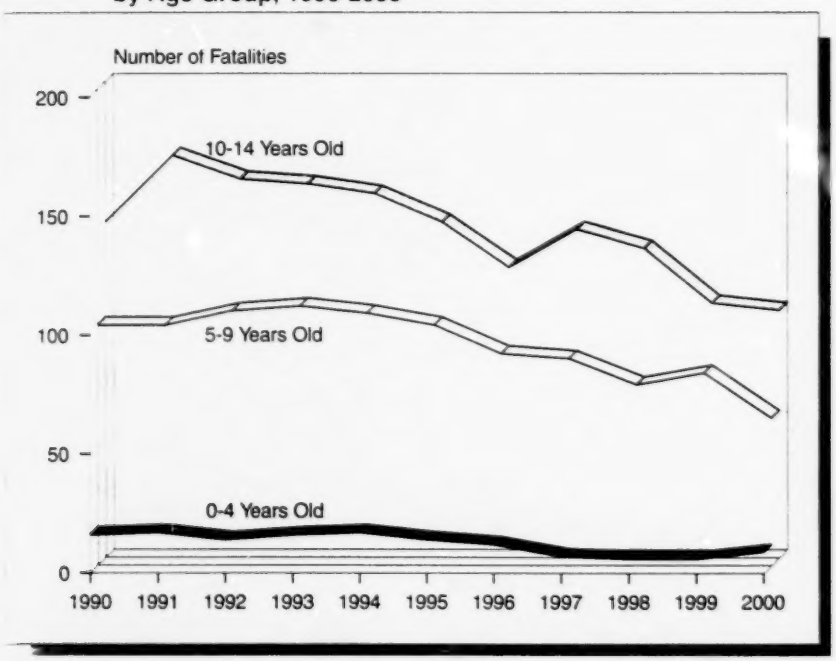
A total of 690 pedalcyclists were killed in motor vehicle crashes in 2000. Children 0-14 years old accounted for 175 (25 percent) of those fatalities.

In 2000, 37 percent of the pedalcyclists injured in motor vehicle crashes were under 15 years old.

***"In 2000, 37 percent of the pedalcyclists injured in motor vehicle crashes were under 15 years old."***

The 175 pedalcyclist fatalities in 2000 for the 0-14 year age group represent a decrease of 32 percent from the 258 killed in 1990.

**Figure 3. Total Pedalcyclist Fatalities Among Children 0-14 Years Old by Age Group, 1990-2000**




Bicycle helmets are 85 to 88 percent effective in mitigating head and brain injuries in all types of bicycle incidents, making the use of helmets the **single most effective countermeasure** available to reduce head injuries and fatalities resulting from bicycle crashes. (Source: Robert Thompson, *A Case Control Study of the Effectiveness of Bicycle Safety Helmets*, Centers for Disease Control.)

### Restraints

Research has shown that lap/shoulder safety belts, when used, **reduce the risk of fatal injury** to front seat occupants (age 5 years and older) of passenger cars by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, safety belts reduce the risk of fatal injury by 60 percent and the risk of moderate-to-critical injury by 65 percent.

During 2000, 8,145 passenger vehicle occupants under 15 years old were involved in fatal crashes. For those children, where restraint use was known, 36 percent were unrestrained; among those who were fatally injured, 56 percent were unrestrained.

**Table 1. Restraint Use by Passenger Vehicle Occupants Involved in Fatal Crashes by Age Group, 2000**

| | Age Group (Years) | | | | | |
|---|---|---|---|---|---|---|
| Percentage Unrestrained | 0-4 | 5-9 | 10-14 | 15-20 | All Other | Total |
| | 27 | 36 | 44 | 52 | 41 | 42 |

***"Child safety seats reduce the risk of fatal injury by 71 percent for infants and by 54 percent for toddlers in passenger cars."***

Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants (less than 1 year old) and by 54 percent for toddlers (1-4 years old) in passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively.

In 2000, there were 529 passenger vehicle occupant fatalities among children under 5 years of age. Of those 529 fatalities, an estimated 251 (47 percent) were totally unrestrained.

**Table 2. Children Under 5 Years Old Fatally Injured in Passenger Vehicle Crashes by Age Group and Type of Restraint, 2000**

| Type of Restraint | Infants (Under Age 1) | Toddlers (Age 1-4) | Total |
|---|---|---|---|
| None Used | 64 | 187 | **251** |
| Child Seat | 66 | 153 | **219** |
| Adult Seat Belt | 1 | 58 | **59** |
| **Total** | **131** | **398** | **529** |

Note: In this table, fatalities with unknown restraint use have been distributed proportionally across the known restraint use categories.

From 1975 through 2000, an estimated 4,816 lives were saved by the use of child restraints (child safety seats or adult belts). In 2000, an estimated 316 children under age 5 were saved as a result of child restraint use.

If 100 percent of motor vehicle occupants under 5 years old were protected by child safety seats, an estimated 458 lives (that is, an additional 143) could have been saved in 2000.

In 2000, NHTSA conducted the National Occupant Protection Use Survey (NOPUS). One of the studies in the survey was the Controlled Intersection Study, which provided more detailed information about child restraint use for children under 5 years old.

**Table 3. Restraint Use by Children Under 5 Years Old**

| Grouping | Restraint Use (Percent) | Grouping | Restraint Use (Percent) |
|---|---|---|---|
| Overall | 91 | Rush Hour | 95 |
| Infants (<1 Year) | 95 | Non-Rush Hour | 92 |
| Toddlers (1 to 4 Years) | 91 | Weekday | 94 |
| Passenger Cars | 92 | Weekend | 84 |
| Light Trucks | 98 | City | 96 |
| Front Seat | 94 | Suburban | 94 |
| Back Seat | 91 | Rural | 72 |

***"Children in rear-facing child seats should not be placed in the front seat of vehicles with passenger air bags. The impact of a deploying air bag on a rear-facing child seat could injure the child."***

Failure to read the child safety seat instructions, in addition to vehicle owner manual instructions regarding safety belts, could result in serious injury or death as a result of a failure of the child safety seat to be securely and/or properly restrained.

Children in rear-facing child seats **should not** be placed in the front seat of vehicles equipped with passenger-side air bags. The impact of a deploying air bag striking a rear-facing child seat could result in injury to the child. NHTSA also recommends that children 12 and under sit in the rear seat away from the force of a deploying air bag.

**For more information:**

Information on youth safety is available from the National Center for Statistics and Analysis, NRD-31, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-on-demand at 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at http://www.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

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